



# HIGHLIGHTS

## HIGHLIGHTS OF THE SPRING 2004 TECHNICAL SUPPORT PROJECT (TSP) MEETING

For their Spring 2004 meeting, EPA's Technical Support Project (TSP) teamed for the first time with the National Association of Remedial Project Managers (NARPM) Annual Training Conference in Miami Beach, May 24-28. The three forums of the TSP—the Engineering, Federal Facilities, and Ground Water Forums—participated in NARPM's plenary sessions as well as the technical sessions and training. About a dozen forum members also served as instructors for the training. Through their participation at NARPM, the TSP hoped to foster stronger ties with RPMs to further their goal of improving technical outreach and transfer within the regions. During the Tuesday morning plenary session, Rich Steimle (OSWER), Headquarters' point of contact for the TSP, provided an overview of TSP to conference participants. This overview included how to contact the Office of Research and Development's (ORD) Technical Support Centers for technical assistance as well as updates on forum activities, such as the development and availability of technical issue papers. Mavis Kent (Michigan DNR), a state representative to the Ground Water Forum, summarized the work of the Interstate Technology and Regulatory Council (ITRC) on technical guidance, training, and conferences (<http://www.itrcweb.org>). The forums also met individually in business sessions to discuss current and future forum activities. This newsletter highlights these activities. For more information on the topics highlighted, please contact your regional TSP representative listed at the end of this newsletter.

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### Ground Water Forum

Several members of the Ground Water Forum (Steve Mangion, Region 1; Dick Willey, Region 1; Andy Crossland, Region 2; Kathy Davies, Region 3; Bill O'Steen, Region 4; Gregg Lyssy, Region 6; Jeff Johnson, Region 7; and Mark Henry, Michigan DNR) presented site-specific experiences with delineating DNAPL source areas. A wide range of sites were represented. Sites were contaminated with a variety of chlorinated solvents and creosote and included both known and unknown source areas—from small to large and shallow to deep. The subsurface geology at the sites ranged from uniform to complex and from unconsolidated deposits to fractured bedrock formations. A variety of characterization and treatment methods were implemented at these sites with

varying degrees of success. Forum members concluded that the overall take-home message from the presentations is that there appears to be no “cookbook” approaches that are universally applicable to all DNAPL delineation situations. Therefore, any guidance on the topic should not be prescriptive but rather allow for professional judgement and flexibility in selecting characterization and treatment methods. Abstracts and Power Point® files for these presentations will be posted soon on the TSP's website at [www.epa.gov/tio/tsp/meetings.htm](http://www.epa.gov/tio/tsp/meetings.htm).

Ruth Israeli (Region 2) alerted the forum to a cost/benefit analysis of source removal versus long-term O&M contained in the report, *The NAPL Remediation Challenge: Is There a Case*

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## Next Meeting

The Fall 2004 TSP meeting is tentatively scheduled for the week of October 18<sup>th</sup> in Sacramento, California. The theme of this meeting likely will be California's list of Emerging Contaminants in Drinking Water, which include perchlorate, 1,4-dioxane, and arsenic. Presentations would include treatment technologies for these contaminants, and field trips will be arranged to McClellan Air Force Base and Aerojet General Corporation to view ground-water remediation projects for TCE, radiological contaminants, and perchlorate. If you are interested in participating in this meeting, contact your regional forum representative listed at the end of this newsletter.

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for Source Depletion? (EPA/600/R-03/143), which is now available on the web at <http://www.epa.gov/ada/pubs/reports.html>. The report suggests that source depletion is justified if the source is less than 20 feet deep, less than 0.1 acre, and the value of the property is greater than \$1M/acre. Source depletion may also be justified if remedial action objectives other than MCLs are acceptable to all parties. The report concludes that the source cannot always be cleaned up to MCLs, but there may be other reasons to address the source zone.

Dave Jenkins (Region 4) reported on the success of using Color Tec colorimetric gas detector tubes for assessing the presence of TCE in soil cores, while drilling wells at an electroplating site in Florida. The screening test was used to determine the best depths to set monitoring well screens. To screen a sample, investigators filled a 40-mL vial one-third full of soil and one-third full of distilled water. The vial was placed in a hot water bath for 30 minutes. A vacuum pump was used to extract air

from the headspace through a needle and into the detector tube. A color change in the reagent indicated the presence of TCE. The Color Tec tubes are also sensitive to DCE and vinyl chloride, but the tubes will underestimate the presence of chlorinated VOCs if BTEX are present in the sample. Field experiments showed that chlorinated VOCs could be detected using the Color Tec tube directly in the RotoSonic sample bag in a manner similar to screening a RotoSonic-drilled core with a PID or FID. This method allows the investigator to keep up with progress of the drill rig. Furthermore, it reliably shows zones where chlorinated VOCs are not detected (reportedly down to 8 ppb), and can detect the most contaminated vertical segment in a plume. Dave's abstract and Power Point® file will be posted soon on the TSP's website at [www.epa.gov/tio/tsp/meetings.htm](http://www.epa.gov/tio/tsp/meetings.htm).

Andy Crossland (Region 2) provided an update on the Ground Water Forum's efforts to create a database of Superfund and RCRA sites where low detection level analyses for 1,4-dioxane have been conducted. With data from

almost all of the regions, the database currently contains 53 sites in 17 states. The forum discussed appropriate next steps and concluded that it should: 1) pass the information to interested parties at EPA Headquarters and in the states; and 2) prepare a short writeup that can be used in the regions to increase the awareness of this emerging issue.

Ken Lovelace (Headquarters/OSRTI) announced that the Ground Water Task Force, a workgroup established under EPA's "One Cleanup Program," has posted two option papers for review on their website (<http://gwtf.clu-in.org/papers/default.cfm#options>): 1) *Cleanup Goals Appropriate for DNAPL Source Zones*; and 2) *Ground Water Use, Value and Vulnerability as Factors in Setting Cleanup Goals*. He asked that the Ground Water Forum and other interested parties to review the option papers to determine whether or not the papers comprehensively identify the issues of national stakeholders (described in the "problem statements" section) and which options they would prefer the Agency to pursue to address these issues. The task force will compile comments (due July 31<sup>st</sup>) and develop a set of recommendations to OSWER management.

## Federal Facilities Forum

The Federal Facilities Forum conducted a regional "roundup" of hot issues affecting federal facilities in each EPA region. Renee Wynn then updated the forum on recent activities and strategies implemented by the Federal Facilities Restoration and Reuse Office (FFRRO) to address these issues,

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which included perchlorate, BRAC '05, performance-based contracting, performance-based RODs, privatized cleanup, FUDS, emerging contaminants, and the Department of Energy's Risk-Based End State Initiative.

Stacie Driscoll (Region 3) demonstrated a proposed streamlined format for CERCLA RODs, which has been presented to the Streamlining Task Force for future consideration at federal facilities. The format is explained in a new manual, which is accompanied by a navigable CD-ROM containing the streamlined ROD with links to reference documents for further information. In addition to being archived on CD-ROMs, RODs developed in the new format can also be web-based. Stacie raised the possibility of streamlining other documents, such as remedial action construction closeout reports.

The Federal Facilities Forum discussed plans to write an issue paper on perchlorate contamination. The issue paper, which will be drafted by Tetra Tech, will focus on the treatment of perchlorate (both in-situ and ex-situ techniques), but will also touch on the general chemistry of perchlorate and the appropriate analytical methods. The target completion date for the issue paper is Fall 2004.

## **Engineering Forum**

Mike Gill (Region 9's ORD Hazardous Substance Technical Liaison) announced that the latest Engineering Forum Issue Paper, *Introduction to Energy and Production at Waste Cleanup Sites* (May 2004, EPA 542-S-

04-001), will be available on [www.cluin.org](http://www.cluin.org) on July 1<sup>st</sup>. The paper, which will help RPMs apply an energy efficiency approach to waste site cleanups, features descriptions of cleanups at four sites: two sites involving energy conservation/reduction and two sites involving energy production. There are plans for a follow-up software tool to accompany the issue paper. This tool will be a web-based energy calculator that allows RPMs to estimate energy use at site cleanups. The calculator is applicable to 13 different cleanup technologies.

The Engineering Forum is pushing ahead with its plans to update the *Remedial Design/Remedial Action Handbook* (June 1995, EPA 540/R-95/059). Once funding for the project is lined up, forum members plan to update the handbook to better accommodate the more recent "One Cleanup Program" concept. The updated handbook will use program-neutral language to provide a general scheme for design and construction concepts, while providing web-based references to reach specific program requirements.

Dave Reisman (EPA National Risk Management Research Laboratory [NRMRL] in Cincinnati) reported that NRMRL is updating five previously published Engineering Bulletins on bioremediation, remediation of PCBs, in-situ chemical oxidation, mining issues, and in-situ soil remediation. Once NRMRL and the Engineering Forum have reviewed the updated bulletins, they will make them available for external review before final publication.

## **New Members**

The TSP is always seeking new members to participate in activities of the Ground Water, Engineering, and Federal Facilities Forums. If you are interested, please contact your regional TSP representative or a forum co-chair listed at the end of this newsletter. A complete list of contact information is available at [www.epa.gov/tio/tsp/member.htm](http://www.epa.gov/tio/tsp/member.htm).

Ed Mead (U.S. Army Corps of Engineers) indicated that the Screening Data Collection Paper he is developing with the Engineering Forum is ready for a final review. The paper, which is also being developed into an ASTM guide, will help RPMs to select and obtain the required physical and chemical treatment process design data at contaminated sites early in the investigation stage. The paper contains tables summarizing what data to collect for in-situ and ex-situ soil and water treatment technologies, as well as the corresponding field and laboratory analytical methods.

## Technical Support Project Regional Contacts

	GROUND WATER FORUM	FEDERAL FACILITIES FORUM	ENGINEERING FORUM
<b>REGION 1</b>	Bill Brandon Ernie Waterman Richard Willey*	Christine Williams*	Ray Cody Sharon Hayes*
<b>REGION 2</b>	Robert Alvey Andy Crossland Ruth Israeli Kevin Willis	Paul Ingrisano	Mark Granger
<b>REGION 3</b>	Kathy Davies Joel Hennessy	Stacie Driscoll Steve Hirsh	Hilary Thornton Frank Vavra
<b>REGION 4</b>	Dave Jenkins Bill O'Steen Kay Wischkaemper	Jim Barksdale Lila Koroma-Llamas Robert Pope	Jon Bornholm Carmen Santiago-Ocasio Leo Romanowski
<b>REGION 5</b>	Dave Petrovski Luanne Vanderpool David Wilson	Gene Jablonowski David Seely	Kaushalya Khanna Bernard Schorle* Karen Mason-Smith Tony Holoska
<b>REGION 6</b>	Dave Abshire Greg Lyssy Vince Malott	Mike Overbay Chris Villarreal	Gene Keepper* Carlos Sanchez
<b>REGION 7</b>	Dave Drake Jeff Johnson* Bill Pedicino	Scott Marquess	Steve Kinser
<b>REGION 8</b>	Helen Dawson Rich Muza	Jim Kiefer* Judith McCulley	Fran Costanzi Bill Rothenmeyer
<b>REGION 9</b>	Kathy Baylor Glenn Bruck Rich Freitas Herb Levine	Glenn Kistner	Harold Ball
<b>REGION 10</b>	Curt Black René Fuentes Howard Orlean Jonathan Williams Bernie Zavala	Harry Craig*	Neil Thompson

\* Denotes Forum Co-Chair